Educating in platform societies:
from Digital Citizenship to public values in a connected world

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Abstract

Digital Citizenship Education has become an increasingly relevant topic in recent years for governments and institutions around the world. DCE is presented in most cases as a new dimension of citizenship education that focuses on teaching students to live critically and safely in digital environments. The topic is closely related to those of media literacy, information literacy and education through digital technologies. Traditional Media Education tools have been updated over time to respond to far-reaching changes in media ecosystems and networked environments. This this did not result in a drastic overcoming of Media Literacy but rather an incorporation of new concepts that arise from the added dimension of networked interactivity. Ultimately, what emerges as prevalent from the analysis of the main discourses on "digital" societies and the need for "digital" citizenship education is that the overuse of the term "digital" leads to various misunderstandings and holds back the development of more adequate and epistemologically founded conceptual frameworks. With regard to citizenship education, the most important aspects to focus on are not about digitization itself but about public values in a connective world: networked life, the non-separability of offline and online, and the platformization of our societies and lives.

KEYWORDS: Digital Citizenship, Education, Media, Networks, Platformization.

1. Introduction

The idea of *Digital Citizenship Education* (DCE) arises from the acknowledgment that most young people today were born and have grown up in the digital era. In the last two decades the Education Department of the Council of Europe – the continent's leading human rights organization whose 46 member states include European Union countries – has been working to develop new policy orientations and strategies to support educators in facing new challenges and to empower future citizens by helping them to acquire the competences they need to participate actively and responsibly in a "digital society". In most European countries it is considered a duty for the authorities to ensure that these "digital citizens" are fully aware of the norms of appropriate behaviour when using constantly evolving technology and participating in "digital life" (CoE, 2017). In summary, as the council states in the section of its website dedicated to Digital citizenship and DCE, the focus is on knowledge, skills and understanding required for users to exercise and defend their democratic rights and responsibilities online, and "to promote and protect human rights, democracy and the rule of law in cyberspace". The aim is to reduce the marginalization of those who are not "digital natives" or do not have opportunities to become "digital citizens" or "digizens". Given the relatively low costs of technologies and network access, for the CoE working group the "digital gap" is more likely to be a gap in skills required to make advanced use of the technology than access to technology per se. DCE represents therefore "a new dimension of citizenship education" that focuses on teaching students to *work, live and share in digital environments in a positive way*. Schools are therefore asked to take care of the education of future citizens with particular attention to network environments and "digital life" in a "digital

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society". It is appropriate to ask ourselves whether we can speak of "digital life", "digital society" and "digital citizenship", and how schools can really play a role in the development of knowledge, skills and competences that are and will be fundamental for people in the 21st Century.

2. The school and the media

During the 20th Century, educational institutions experienced a complicated relationship with the world of electronic communication and multimedia. Even in the so called "electronic era", characterized by multimedia and an increased circulation of information, educational institutions have largely maintained the characteristics that had defined them in the previous era. In the "pre-electronic" society, the school had in fact functioned as an important channel through which the youngest could break the barriers that surrounded the family sphere by accessing information about the outside world (Meyrowitz, 1985). Between the 19th and 20th Centuries, communication systems, as well as arenas and places of public participation, began to change also under the influence of new technologies of electricity and simultaneity. With the spread of electronic media, radio and television above all, the conditions of the information ecosystem and the traditional relationships between physical environments and social situations have changed (Kern, 1983; Flichy, 1991). Control of the media environment has been added to the control of the physical environment, which has made social spheres defined by walls and gates a particular type of environment for interaction among many. Several scholars have highlighted the close connection between the form of the school system and the informative characteristics of the printing press as a medium, as well as the often-automatic fear and distrust of pedagogical culture towards multimedia (McLuhan, 1962; Ong, 1982; Eisenstein, 1979; Meyrowitz, 1985; Robinson, 2001). Pedagogy itself found it difficult to overcome the brainframes that took shape during the modern age, continuing to think of itself as a discipline modeled on typography and favoring the linear articulation of knowledge (Dewey, 1956; Maragliano, 2004).

The pedagogical implications of a conservative approach to the interpretation of non-typographic media often result in educational institutions built around a single salvific technology (Strate, 2012; Frasca, 2005; Harris, 1986). With the exception of some highly criticized proposals – such as John Dewey's ideas about the educational function of images –, 20th Century education is therefore defined by difference on the distance from the daily practices of cultural consumption, from the multiple imaginaries connected to the diffusion of radio plays, cinematographic films, comics, television programs, videogames, communications networks.

Not infrequently, in the pedagogical field, we find ourselves contrasting the negative city of the world with the positive one of the educational set. A proposal that tries to keep together the world of education with the concrete one of the daily life of city activities is contained in *City as classroom* (McLuhan et al., 1977). In that book, inspired in part by Dewey's proposals on progressive education, many of the problems of schools and universities are linked to a clash between different media environments and different media logics. Marshall McLuhan described the educational system of 20th Century as a dying and outdated system, oriented to past values and past technologies (1969), and in a 1959 address at a conference sponsored by the American Association for Higher Education, noted how Dewey correctly intuited the need to reform education in order to adapt to the new electronic media environment. According to McLuhan, the only limit to that intuition was that Dewey lacked the understanding necessary to create an effective program of curricular change, that could only be obtained by applying a media ecology or ecosystemic approach (Strate, 2012, p. 45). Media ecology is defined as the study of media as *environments*, and the word ecology implies the study of environments in their structure, content, and impact on people (Postman, 1970). Beyond academic publications and scientific literature, international and European institutions have tried to respond to the rapidity of change in media ecosystems, going so far in recent years as to explicitly mention – even in official documents – the need for an ecosystemic approach.

3. Media Education and networks

In the book *Media Education* published in 1984 by UNESCO, education is described not as an isolated subsystem, closed in exclusively on its internal components, but as something that is influenced by many processes that bring change to societies and to knowledge. In those pages it is described as ineluctable the requirement that education should take a different view of the mass media, take account in its content of the constantly swelling volume of messages they convey, and learn how to turn media techniques and technology to its own advantage. The book remarks that the coexistence of the two institutions – the "traditional school" and the "parallel school" of the media – is hardly peaceful. The school, according to authors, feigns ignorance of the media's specific language, and fails to see how content and teaching methods are nothing "but an islet in the flood of information and demands for attention, in the form of sounds and images, to which the child is subjected on leaving the classroom" (1984, p. 7). Nevertheless, the school alone is seen by authors as capable of constructing the conceptual and interpretative codes with which information can be mastered and integrated: neither the media nor families can achieve the goal of a full

development of children's awareness. The origin of the term "media education" can be traced back to the 1970s, and following various elaborations it has been used over time according to three perspectives: education *to* the media, education *with* the media and education *for* the media. During the last forty years, together with the definition "Media Education", those of "Media Literacy", "Internet literacy", "Media and Information Literacy" (MIL) and "Digital Literacy" have also been used, and are among the foundations of what was initially defined as *e-citizenship education* and is defined today as DCE. UNESCO issued its Model MIL Curriculum in 2011 – at the time the only international curriculum that harmonized information, media, and digital competencies under the umbrella term of "MIL" – which has been updated over the years (2013a; 2013b; 2016; 2021a). UNESCO also proposed the so called *Five Laws of Media and Information Literacy*, the second of which states that "every citizen is a creator of information/knowledge and has a message: they must be empowered to access new information/knowledge and to express themselves". According to this approach, information, communication, libraries, media, technology, the Internet and other forms of information providers "are equal in stature and none is more relevant than the other". One key difference nevertheless is that Media Literacy-related initiatives were concentrated mostly on teaching youth to be critically engaged *consumers* of media, while the Internet-Information-Digital Literacy approach is more about enabling youth to *participate* in digital media in wise, safe, and ethical ways.

In the pedagogical field, it was Seymour Papert (1980) who firmly promoted - with little institutional response – the active use of digital technologies, but communications based on network codes and structures is different from all the other mediascapes we have known and used up to now. In fact, online environments can include all of them and add even more (that is adapting and constantly reshaping orality, writing, printing, audiovisuals, interaction). This does not imply a drastic overcoming of Media Literacy but rather an incorporation of new concepts that arise from the added dimension of *networked interactivity*.

Starting from the early 2000s, the Council of Europe has published several volumes dedicated to examining topics such as "Information technologies in schools" (2000), "Learning and teaching in the communication society" (2005), "Internet literacy" (2006), laying the foundations for the future work of European expert groups on these subjects. The Council has devoted a specific project to the impact of ICTs on education systems in Europe. The declared goals were to be able to understand and manage the increasingly fast change in European societies and to transform education systems so as to answer both the needs of those societies and the expectations of their individual members. These early publications also contained some practical fact sheets, each covering a particular topic on Internet use. Not infrequently the dimensions of educating *to* the media and educating *with* the media have emerged as necessarily intertwined.

The very idea of DCE (CoE, 2017) therefore takes up the reflections that emerged in the 20th century on the need to understand and integrate the media into curricula and educational practices, and is made more urgent by the specific characteristics of networked media: participation, interactivity, user generated content, algorithmic logics and *platformization*. Internet and social media have opened up new possibilities for participation in what was called the "public sphere" in the age of the mass media, now *networked publics* (Varnelis, 2008; Ito et al., 2009). Ultimately, what emerges as prevalent from the analysis of the main discourses on our "digital" society and the need for "digital" citizenship education is that the most important aspects to focus on are not about digitization itself but about public values in a connective world: *networked life*, the *non-separability of offline and online* and the *platformization* of our societies and lives (Rainie & Wellman, 2012; Floridi, 2017; van Dijck, 2018).

4. Education and civic engagement

Civic engagement and digital citizenship are social and mediated processes, so they must be considered in the light of process indicators for those involved in educational processes, teachers, students and policity makers (Purvis et al., 2016). The literature also shows not insignificant differences in this area – in terms of learning, classroom climate and activities – between students from more advantaged backgrounds and those from more disadvantaged backgrounds. The education system, with the necessary support, can therefore respond to the goal of creating greater levels of equality in political commitment. In the medium and long term this involves structural interventions on the initial and continuing professional development of teachers and school managers: even in the context of digital citizenship, inclusive teaching must concern the development of learning environments in which all students, in addition to having access in all training activities, are involved in discussions and in democratic and civic participation paths (Tomlinson, 2014). The teacher who deals with civic education and citizenship must therefore develop deep knowledge of the students' background, in order to have the tools to allow them to reflect on the causes of the difficulties in accessing democratic and participatory activities, and to have their say in the classroom.

In the second cycle of the *International Civic and Citizenship Education Study* (ICCS, 2016) some useful measures have been identified to better understand strategic elements and factors for DCE. The project, promoted by the International Association for the Evaluation of Educational Achievement, aimed to work

on context variables related to contents and organization of the teaching of civic and citizenship education, and to report on teachers' experiences, teaching practices, environmental contexts, school and classroom climate, contributions from families and territories. Some references to the value of the Internet as a communication tool in civic participation, both for teachers and students, emerged from the study. The responsible use of the Internet was associated with the issue of privacy, the reliability of sources, knowing how to inquire about political or social topics and participate in related online debates, presence on social media, bullying and offensive content. The Standards and the framework for digital citizenship proposed by the International Society for Technology in Education also insist on these issues (Ribble, 2015).

In the European context, the implementation of DCE shows marked differences between the different macro-areas of the Union, and the scientific literature shows that even in the areas of Northern Europe – traditionally more attentive to changes connected to digital transformation and where the issue of citizenship is strongly present in national curricula, with schools well equipped as regards infrastructures and devices – there is a certain degree of uncertainty in the use of social media for the development of digital citizenship, both for teachers and students (Christensen et al., 2021). In the Norwegian curriculum the area of citizenship is not explicitly mentioned, and the theme of civic participation in the relationship with the media is declined within the discourse on democracy and national identity; in Denmark there is no reference to social media but the central role of the Internet for the acquisition of information and the development of relationships between people is emphasized; in Sweden the emphasis is on the opportunity to have up-to-date learning tools and digital skills, but the latter are not connected to the students' ability to influence society. The country that addresses the issue in a more complex way is Finland, where ICT competences – described both as an object and as a learning tool – are one of seven main transversal competences and are presented as essential civic skills: the ethical use of technology is described as crucial for the future of humanity and the environment, and social media is included in teaching practices and training pathways for work opportunities on cooperation, interaction, responsibility.

Most teachers regularly make use of web-based sources to design courses on citizenship, although research shows that very few of them work with students on social media, online forums or blogs. On the other hand, most students do not publish online content related to political or social issues and do not plan to do so in the future, but this aspect is linked in various ways to their offline engagement on the same issues. One of the most interesting results of the work *Developing Digital Citizenship and Civic Engagement Through Social Media Use in Nordic Schools* by Christensen, Biseth and Huang is the concept map that summarizes the six

macro-themes or factors that characterize the promotion of digital citizenship in schools through social media: 1) Societal values and ideas; 2) ICT, digital tools, and technology; 3) Handling of information and knowledge; 4) Teaching methods and learning; 5) Social media; 6) Civic engagement.

DCE must also be considered in light of the distance between the ideals of digital citizenship expressed in the formality of the curricular level and the substance of students' concrete practices. There are in fact some possible risks to consider: one is that formal curricula end up representing ideals that precede practice and remain distant from it; also, can be difficult to solicit in a formal context students who often see online spaces more as private environments for building and maintaining relationships and other types of online presence.

5. Rethinking Citizenship Education: an ecosystemic approach

Digital Citizenship should not be represented as a purely technical or virtual domain separate from other forms of civic engagement. In this sense, school curricula must consider online spaces like any other political space: *onlife spaces* (Floridi, 2017) in which young and old people can commit themselves to concretely develop citizenship paths also through interactions on social media. Digital citizenship and civic engagement represent not only skills but also ways of living: consequently, transformative processes (Dewey, 1916) must be at the center of Learning Design as well as definition and evaluation of the factors useful for the growth of conscious participation. In this sense, it is useful to work on the relationship between citizenship education and "digital" learning: the two dimensions in different European countries are often separated, even where there is equipment for online collaboration and a perceived high level of competence in managing online communication. These are clearly not simple skills: to be able to make the development of DCE tangible, the digital competences indicated in the European frameworks for citizens (*DigComp*) and for educators (*DigCompEdu*) and the full understanding of the "digital transformation" of society must be integrated into citizenship education programs and into teaching-learning activities in a broad sense. School practices and teacher training should be aimed at addressing, developing, and cultivating attitudes, values, civic knowledge and skills useful for young citizens who face an uncertain and ever-changing future.

An attempt in this sense can be found in the Italian Law 92/2019 on the introduction of school teaching of civic education: the guidelines indicate in the transversality of teaching a paradigm of reference different from that of traditional disciplines. What is defined as a

"transversal value matrix", to be combined with disciplines to develop processes of interconnection between disciplinary and extra-disciplinary knowledge, can lead the way for a transformative, inclusive and "digitally augmented" education. In the European Union, moreover, the recommendations of the European Council and the specific frameworks on digital skills of citizens and educators have recently been reinforced by the Digital Education Action Plan (DEAP 2021-2027). The DEAP aims to go beyond the first Plan adopted in January 2018 with the long-term goal of creating a European Education Area and includes measures for inclusive and high-quality digital education and training. In this action plan, built on the basis of an approximately three-month public consultation, Strategic Priority Number 1 is to foster the development of a *high-performing digital education ecosystem* and refers to the need for teachers and trainers "to participate more effectively in the digital transformation of education and to understand the opportunities it can offer, if used effectively". Digital transformation can be read as the reconfiguration of a complex ecosystem that includes all kinds of technologies and different brainframes related do different media and network environments. The term ecosystem is specifically used by the authors of the communication relating to the DEAP from the Commission to the European Parliament, in order to be able to frame the complexity of the phenomena that it is intended to govern. "Environment" and "system" are terms that refer to a network of relationships between different entities that interact in the same context: the students and teachers are clearly involved here, but also the environment, the school area and all the other figures involved in the learning processes, as well as environments, infrastructures, devices, software, and conceptual frameworks. The ecosystemic perspective, if fully adopted, is also useful for overcoming the rigid centrality of the human and of the subject-object dichotomy that still contributes to shaping scientific discourses and even the documents of the working groups of international experts. In interactive ecosystems, humans, data, climate, sensors, biodiversity and computerized territories have begun to articulate collaborative policies and solutions through dialogue with data and the connection between different types of intelligences. The very idea of citizenship, based on the fundamental rights of people should take into account the challenges of climate change and the evolution of the latest generations of intelligent networks (Accoto, 2018; Di Felice, 2019).

With reference to Dewey, civic education can and must be concretely transformative in order to allow and support future citizens in their civic engagement beyond conventional democratic activities and individual disciplinary knowledge. However, transformative education entails having transformative learning paths for both teachers and students: both have and will have to do with the reality of an uncertain future and can be actors and subjects capable of having an impact on change. Students (and teachers) bring their "digital" lives and experiences to school and this aspect of reality is not sufficiently understood in our educational systems (McCowan, 2011). For the Council of Europe, *formal education must consider online and offline lives as part of a whole*. This acknowledgment was the starting point that moved the Education Department's DCE project. To guide the work, three aspects of online life have been identified – being online, online well-being and online rights – on which to intervene to promote the fundamental principles of the CoE: democracy, human rights and the rule of law. These principles must be considered both for relationships and behavior in online environments and for offline relationships and behaviors: "each person's responsibility as a citizen is the same" (CoE, 2019). The challenges that the onlife world presents to democratic citizenship are illustrated in the *Digital Citizenship Education Handbook*, designed to help educators, and interested people to better understand and face them. The handbook is based on the Council of Europe Competence Framework for Democratic Culture and on the acquisitions of the Education for Democratic Citizenship program and the *Internet Literacy Handbook* as part of a path to approaching citizens' education for future societies. Although the Competence Framework shows the ultimate goals of digital citizenship in a way that is clearly understandable to educators, families, and policy makers, it lacked several essential ingredients to facilitate its practical educational adoption. The aim of the *DCE Handbook* – based on the work of the DCE Expert Group – is therefore to present information, tools and best practices to support the development of skills in line with the vocation of the CoE to empower and protect future citizens, enabling them to live together as equals, online and offline, in today's democratic societies characterized by strong cultural diversity. The *DCE Handbook* was conceived as a practice-oriented publication aimed at teachers, parents, policy makers and platform providers. It describes in depth the multiple dimensions that make up each of the ten areas of digital citizenship (*digital domains*) identified by the DCE Expert Group and includes a fact sheet on each area that provides ideas, best practices, and further references to support educators in building skills that will be useful to students as they face future challenges.

6. Citizenship Education in platform societies

One of the preconditions for the development of "digital" citizenship paths is access to technology, without which – given the close integration of ICT into everyday life that is now *onlife* – even "non-digital" citizenship is now almost impossible. Starting from this aspect, it is worth reflecting on the use of the term

digital applied to the most diverse fields, including citizenship. A simple calculation of the occurrences of the term in the cited texts shows a repeated use involving phrases such as digital age, digital skills, digital education, digital teaching, digital pedagogy, digital competences, digital literacy, digital learning, digital economy, digital creativity, digital transformation, digital citizenship etc. Although there are important issues such as that of digital transformation, it must be recognized that with the overuse of the term "digital", both positively and negatively, misleading automatisms have often come to life, with not insignificant consequences on public debate and institutional policies. Therefore, it seems more appropriate to work on continuing professional training and fundamental skills and competences: insisting on defining the latter "digital" – even if this has served in a period of transition like the one we are going through – now makes less and less sense. Over time, the adjective "digital" is destined to disappear, and the European *Digital Education Hub* envisaged by the aforementioned *European DEAP* will in all likelihood become a European *Education Hub*.

It therefore appears more appropriate to refer to contexts, relationships and high-quality educational content, relevance, inclusiveness, flexible and accessible learning opportunities, learner-centered design, and *infrastructure*. Each era has had knowledge infrastructures that have ensured the production and circulation of knowledge, and today that infrastructure is increasingly made up of networks. As emerges from almost all national and supranational documents, very high-capacity connectivity is fundamental for our societies, and consequently it appears a priority to guarantee a fast and reliable Internet connection for institutions and learners (UNESCO, 2021b, Principle 1; UNESCO, 2022). This aspect is only apparently material, since it is closely linked to far-reaching cultural changes (Accoto, 2018; Floridi, 2017; Weinberger, 2012; Castells, 1996; Rivoltella, 2008, 2020).

Citizenship is not something that is "also digital", because a knowledgeable relationship with online environments is to be seen both as a means (useful for services, streamlining procedures, etc.) and as an end (enhancing creativity, skills, critical thinking etc.). It is therefore appropriate to move beyond digital literacy (Buchholz et al., 2020) and to seriously consider the abandon of the use of the term "digital" also in relation to Citizenship and Citizenship Education, because: *a)* it is often implicitly associated with a crude conception of information technologies as intrinsically "new" or innovative; *b)* it promotes a social representation of "digital" objects and the practices related to them as a completely simplified unicum, far from concrete reality; *c)* a full citizenship cannot exist today without access to network infrastructures, online information and knowledge, and online services of the public administration and the private sector. In the same *DCE*

Handbook, the authors never use the term "digital" in the list of ten areas defined as the basis for the work on digital citizenship grouped into the macro-areas: they instead use the term *online*, which more precisely specifies what is being referred to.

Finally, in order to design effective pathways that take into account all the principles indicated, it is crucial that teachers and students work on deepening their understanding of the dynamics and characteristics of the so-called *platformization* and the role of software, algorithms and AI in our societies. There are many scholars who in recent years have stressed the need to think about platformization, often on the level of law or on that of cultural and communicative studies. Less frequently, however, the topic has been raised by those who work in education and training, and this despite the obvious links to the broader topic of Digital Citizenship. The transformations associated with platformization (highlighted by scholars such as Van Dijck and others), in fact, are directly related to the concepts of *ecosystem*, *education* and *responsibility* of the actors involved.

The study of the dynamics and characteristics of platform societies (and the different role of platforms in democratic and authoritarian countries) is increasingly important in education, also to overcome a structural backwardness in both digital transformation and the debate – even in academia – on the consequences of platformization. Many of our cultural practices are strongly influenced by the automation processes of platforms, which overlap with known and more traditional elements such as social and cultural background, social class, experiences, etc. Software, algorithms and platforms do not simply respond to our tastes and choices but concretely help shape and influence them (Kearns & Roth, 2020; Finn, 2017).

Interacting with platforms and systems capable of making continuous decisions independently is already a reality in the daily life of European and global citizens. It is no longer conceivable, therefore, to think about education and citizenship without considering the understanding of phenomena that characterize and shape our lives: this is true for people as well as for companies, institutions, and especially for educational systems. Taking up the words of the *Rewired Global Declaration on Connectivity for Education* (UNESCO): "connected technologies are rapidly altering the 'where', 'when', 'who', 'what', 'how', and 'why' of learning" (2021b). Above all, it is no longer possible to learn all the knowledge necessary for the rest of life during the school years, *so the way in which one learns becomes more important than what one learns*, and this is even more valuable when one considers the rapid changes that our societies are facing and will face in the future. The actual networked ecosystem forces us to rethink not only our methods but also our teaching philosophies, which are still shaping education. As we all increasingly move toward a

communication environment of instant and infinite information, says anthropologist Michael Wesch, it becomes less important for students to know, memorize, or recall information, and more important for them to be able to find, analyze, sort, share, critique, discuss, and create information: "they need to move from being simply knowledgeable to being knowledge-able" (Wesch, 2009). In this regard, it should be noted that a different interpretation of the relationship between digital technologies and creativity could help to encourage the teaching of arts and music, vital for the development of the person but penalized over time in different ways in many European countries (von Gillern et al., 2022; EACEA, 2009).

In conclusion, it still appears necessary today to continue working on the basis of the four pillars for the reconfiguration of education systems illustrated in 1996 by the then President of the European Commission Jacques Delor in the UNESCO Report of the International Commission on Education for the 21st Century: *learning to learn, to do, to be and to live together.*

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